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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,671	04/21/2004	Toshiyuki Okayasu	02008.157001	4482

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EXAMINER

NGUYEN, HAI L

ART UNIT PAPER NUMBER

2816

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/828,671

Applicant(s)

OKAYASU, TOSHIYUKI

Examiner

Hai L. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 21 April 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1, 2A, 2B, 2C, 2D, and 2E, should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The abstract of the disclosure is objected to because the words are too close together, no space between them. New substitute abstract with cleared spaced between words is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: the spacing of the words of the specification is such as to make reading/OCRing difficult. New application papers with cleared spaced between words is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited limitations "a control unit for controlling the delay amount of the variable delay circuit unit based on the delay amount measured by the delay amount

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measuring unit”, in claim 4; and “a control step of controlling the delay amount of the delay step based on the delay amount measured in the delay amount measurement step”, in claim 10, are not supported either by the disclosure or the drawings. There is insufficient antecedent basis for these limitations in the claims.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4-7, 10 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The recited limitation that “a control unit for controlling the delay amount of the variable delay circuit unit based on the delay amount measured by the delay amount measuring unit”, in claim 4, is not understood as to how the control unit (16 in instant Fig. 3) can perform the claimed function such as controlling the delay amount of the variable delay circuit unit (14) based on the delay amount measured by the delay amount measuring unit (18). Since, the specification does not contain a full detail description that shows how the control unit can perform that recited function. Note that claim 10 also has a similar problem because of the limitation “a control step of controlling the delay amount of the delay step based on the delay amount measured in the delay amount measurement step”.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Fig. 1 in the present application, in view of Gillig (US 5,604,468).

With regard to claims 1 and 9, the admitted prior art (APA) in Fig. 1 shows a timing generator, and a method of use thereof, comprising a reference signal (10); a variable delay circuit unit (14) for receiving the reference signal and outputting the timing signal which results from delaying the reference signal as much as a predetermined time; and a delay amount measuring unit (18) for measuring a delay amount of the variable delay circuit unit. Fig. 1 of APA shows a timing generator meeting all of the claimed limitations except for a modulating unit (30 in instant Fig. 3) for modulating the frequency of the reference signal. Gillig teaches in Fig. 6 a circuit having a modulating unit (206; by given the broadest reasonable interpretation, 206 is the modulating unit because it has a function of modulating the frequency of the reference signal) as recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement the modulating unit taught by Gillig with the prior art (Fig. 1 of APA) in order to provide a temperature stabled output frequency for meeting a specific requirement which is in each case optimally matched to its application.

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With regard to claim 2, the reference signal generating unit supplies the reference signal to a circuit (12, 14, 18, 32) comprising the variable delay circuit unit.

With regard to claim 3, the references also meet the recited limitation in the claim.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okayasu et al. (US 6,597,753) in view of the admitted prior art, Fig. 1 in the present application, and further in view of Gillig, as applied to claim 1 above.

Okayasu et al. discloses in Fig. 3 a test apparatus for testing a semiconductor device (18, 22), comprising a pattern generating unit (10); a timing generator (14); a waveform adjustor (12); and a judging unit (20) for receiving an output signal from the semiconductor device in response to the adjusted signal (39) and judging quality of the semiconductor device based on the output signal. Fig. 3 of Okayasu et al. shows a meeting all of the claimed limitations except that Okayasu et al. does not disclose the structural details of the timing generator. As discussed above, the admitted prior art in view of Gillig discloses a timing generator comprising all of the claimed elements as recited in the claim. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to replace the timing generator in Fig. 3 of Okayasu et al. with the timing generator taught by the prior arts (Fig. 1 of APA in view of Gillig) in order to provide a temperature stabled output signal.

### *Conclusion*

9. Regarding claims 4-7, 10, and 11, the patentability thereof cannot be determined because of failing to comply with the enablement requirement.

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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For example, Sato et al. (US 5,488,325) is cited as of interest because it discloses a timing generator intended for semiconductor testing apparatus.

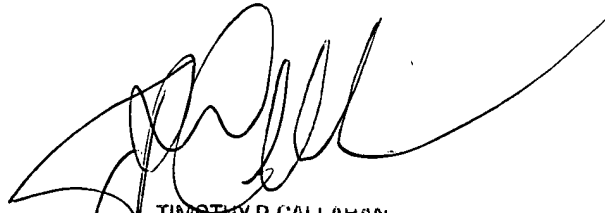
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN   
October 21, 2004

  
TIMOTHY P. CALLAHAN  
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